

## 9 Cognition

The traditional philosophical category of epistemology serves medieval philosophy poorly. The medievals were concerned with most of what now falls within the theory of knowledge, but they never thought of knowledge as the sort of integrated topic around which one might construct a philosophical theory.<sup>1</sup> Much the same might be said about philosophy today. In place of knowledge, philosophers now focus their energies on cognition; in place of the theory of knowledge, we now have cognitive theory. This way of dividing up the philosophical terrain turns out to be well suited to the study of medieval philosophy. The medievals, rather than focusing on how knowledge differs from mere true belief, focus on how we manage to form true beliefs: How does the process work? To answer this question is to develop a theory of cognition.

As in most matters, John Duns Scotus does not distinguish himself in cognitive theory by adopting a radically new perspective. Scotus accepts the general cognitive framework set out by his most distinguished recent predecessors, Thomas Aquinas and Henry of Ghent; where he disagrees, he does so in ways that reinforce the broader contours of the theory.<sup>2</sup> Scotus is interesting, then, not because he offers any startlingly new ideas about cognition, but because he gives a careful and penetrating analysis of the field as it stood at the end of the thirteenth century. In many ways, he sees the issues in more depth than had anyone before him.

### I. THE COGNITIVE FRAMEWORK

Medieval cognitive theory takes its primary inspiration from Aristotle, with significant modification and supplementation from

Augustine and Avicenna. The history of thirteenth-century cognitive theory largely consists in progressively more sophisticated efforts at combining these various influences into a systematic and harmonious account of how animals (including, especially, human beings) process information about the world around them. By the end of the thirteenth century, there was substantial consensus among the Scholastics about the proper way of understanding the basic components of our cognitive systems. Scotus endorses the consensus view in most of its basic details.

First, and most basically, Scotus endorses a distinction between the sensory and the intellective components of cognition. The sensory powers consist of the usual five external senses and the internal senses of the brain: common sense, phantasia, imagination, the estimative power, and memory.<sup>3</sup> As we will see, Scotus rejects one standard way of drawing the distinction between sense and intellect: he denies that material individuals are the object of the senses exclusively, and he denies that universal essences are the exclusive object of the intellect (see Section IV). Still, Scotus does accept another standard basis for the sensory–intellectual distinction: he agrees that the sensory powers have physical organs whereas the intellect is immaterial.<sup>4</sup> This leads to the further conclusion that the senses, owing to their materiality, cannot act directly on the intellect, owing to its immateriality.<sup>5</sup>

Among animals, only human beings have an intellect. Like most of his contemporaries, Scotus accepts the familiar Aristotelian distinction between the intellect's receptive component (the possible intellect) and its active component (the agent intellect). Again like most of his contemporaries, Scotus takes both the agent and possible intellect to be enduring powers within the human mind. He rejects readings of Aristotle on which the possible intellect exists only when it is actually thinking,<sup>6</sup> or on which the agent intellect is not a part of the human mind.<sup>7</sup> Scotus is reluctant, however, to describe these as two separate powers within the mind: he postulates a formal rather than a real distinction between the possible and agent intellects.<sup>8</sup> But the ontological status of the distinction has little bearing on Scotus's theory of cognition: even a merely conceptual distinction would require a difference in function. The function of the agent intellect, in Averroës's words, is "to transfer from order to order," to make the transition from sensory images to universal concepts.<sup>9</sup> The function of the possible intellect is to receive and then to store

this information; human thought occurs in virtue of these intelligible forms (or *intelligible species*) being actualized in the possible intellect.<sup>10</sup>

In this life, the intellect derives its information from the senses (see Section V). But even before the intellect begins to classify and conceptualize the sensory data, the senses themselves process that information in various complex ways. The simplest form of sensation, sensation *per se*, occurs when one of the five external senses apprehends the sensible quality that is its proper object: when sight sees color, for instance, or hearing hears sounds. Speaking more broadly, one sees darkness, or sees a human being. This is sensation *per accidens*.<sup>11</sup> When the internal senses of the brain store and reimagine this information (in the internal sense of *phantasia*), they generate *phantasms*.<sup>12</sup> These phantasms, abstracted by the agent intellect, are in this life the intellect's sole source of information:

A real concept is caused naturally in the intellect of a wayfarer only by the things that are naturally capable of moving our intellect. These are (a) the phantasm (or the object depicted in phantasms) and (b) the agent intellect.<sup>13</sup>

With this, Scotus endorses Aristotle's well-known remark that "the soul never thinks without a phantasm."<sup>14</sup> Scotus takes this remark one step further. It was Avicenna's view that the intellect, once given its initial data, can operate entirely on its own, free from any sensory influence.<sup>15</sup> Scotus rejects this, holding instead that the intellect must continually turn back toward phantasms. Following Thomas Aquinas,<sup>16</sup> but explaining the idea rather more clearly, Scotus maintains that the senses and intellect work in tandem:

The intellect understands nothing except by turning toward phantasms: not that this turn (*conversio*) belongs to intellect alone, [looking] over phantasms; rather it belongs to the soul as a whole, so that the intellect understands nothing except while *phantasia* forms phantasms (*phantasiatur*).<sup>17</sup>

Our conceptual thoughts are guided by our sensory images, not just as a starting point but as a constant touchstone and inspiration.

## II. MENTAL REPRESENTATION

In the long, unrelentingly difficult thirteenth question of his *Quodlibeta*, Scotus asks whether the act of knowledge is absolute or relative. This is to ask whether having knowledge consists in some

sort of relation to another object, or whether it consists in an absolute, nonrelational quality of the mind. Scotus's answer is that all cognition, sensory and intellectual, involves both of these components.<sup>18</sup> There must be a relation, first, because it is essential to all cognition that there be some object toward which the action tends. Contrary to the more familiar Aristotelian suggestion that cognition consists in a certain kind of reception of form, Scotus defines cognition in terms of an intentional relationship to other things:

A cognitive power must not only receive the species of its object, but also tend through its act toward the object. This second is more essential to the power, because the first is required on account of the power's imperfection. And the object is the object less because it impresses a species and more because the power tends toward it.<sup>19</sup>

Here *to tend* (*tendere*) has all of the contemporary implications of *intentionality*. To tend toward another is to represent another, to be about another – not in the way that a word or a picture represents something else, but in the distinctive (and highly mysterious) way in which thoughts and perceptions are about things. Words and pictures do not themselves tend toward what they represent; they do so only through the mind of an interpreter. Thoughts and perceptions need no interpreter, for they are the interpretation; they themselves tend toward other things. In this sense, they have intentionality.

So cognition essentially involves a relation to an object. But that is not to say that a cognitive act just is a relation. The act itself is an absolute entity, existing wholly within the cognitive power. We do not usually conceive of cognition in this way because “an operation is generally understood in respect of its tending toward an object.”<sup>20</sup> But the foundation of this intentional relationship is a nonrelational quality existing within the cognitive agent. It is this absolute quality that should be the locus of any attempt to give a meaningful explanation of intentionality. How do thoughts and perceptions tend toward things? The answer Scotus gives is in basic respects the same one that philosophers had been giving throughout the thirteenth century: he appeals to sensible and intelligible species that inform our cognitive powers and thereby cause acts of cognition tending toward the objects that the species are a likeness of.<sup>21</sup> The difficulties with this sort of theory were by this time well known;<sup>22</sup> Scotus offers what is in many respects the most sophisticated medieval attempt to defend the theory.

One of the most common complaints about the species theory was its apparent superfluousness. Scotus considers the objection:

The presence of the object is the cause of the presence of the species, and not vice versa. For it is not because the species is in the eye that white is present, but vice versa. Therefore the first representation of the object is not through the species, and therefore it is superfluous to posit the species for the sake of the object's presence.<sup>23</sup>

Some sort of image may be necessary in cases where the object has disappeared. But as regards the initial apprehension ("first representation") of the object, there is no need for species. The object itself is there, exercising its own causal influence on the cognitive process.

Scotus does not make the most obvious reply: he does not insist that the object is not immediately present, and that the species is needed as an intermediary, a likeness standing in for the thing itself. Critics of the species theory often assumed that such a causal role was the *raison d'être* of species.<sup>24</sup> But this is not Scotus's view. He gladly allows that the external object is present – that it has *real presence* – and that it is the efficient cause of the cognitive act. Still, Scotus insists that this is not enough to account for cognition. Another kind of presence is needed, the presence of the object-as-cognized:

This doesn't require the real presence of the object in itself, but it requires something in which the object is displayed (*reducet*). . . . The species is of such a nature that the cognizable-object is present in it not effectively or really, but by way of being displayed.<sup>25</sup>

Of course the object in itself can be present and can make an impression on our cognitive faculties. But that does not explain cognition: that sort of relationship obtains throughout the natural world, between the sun and a rock, or waves and a beach. To account for the special sort of relationship at work in cognition, Scotus appeals to a further kind of presence, which he describes as the object's presence *sub ratione cognoscibilis seu repraesentati*.<sup>26</sup> It is this sort of presence, here said to be brought about through species, that is required for the intentional relationships found in all cognition.

The need for this special kind of presence is more clear in cases in which the object of thought is not itself present. Even here, thought has a kind of relationship to an object: one must be thinking about something. But since the object has no *real* presence, and so exerts no

causal influence, the relationship is entirely conceptual. "A relation can have no truer being than does the term to which it relates";<sup>27</sup> since the object's existence is merely conceptual, so too is the relationship. In such cases, the basis for the conceptual relationship must be entirely within the cognitive power. Scotus again appeals to the presence of the object-as-cognized: when we manage to think about objects, those objects have what Scotus calls *esse cognitum* within intellect.<sup>28</sup>

This appeal to a special sort of existence, to the presence of the object-as-cognized, is mysterious on its face and perhaps ultimately obscure. But there is something to be said for Scotus's approach. When we perceive or think about objects in the world, we are not perceiving or thinking about likenesses or representations of those things. Our object is rather the things themselves: our perceptions and thoughts tend outward; our intentional relationship is with the world, not with our inner mental states. At the same time, the cognitive act is grounded in what we have seen Scotus describe as an absolute (nonrelational) quality within the mind. It is this quality that somehow explains the intentional relationship – but how? We want to avoid the conclusion that "each intellection will be its own absolute action, a form stopping with itself, having no outside terminus."<sup>29</sup> And it seems plainly inadequate to appeal to mere likenesses, as if we grasp the things in themselves in virtue of having access to pictures of them. This sort of move is inadequate, not so much because it sets off well-known skeptical alarms,<sup>30</sup> but simply because it fails to do justice to the phenomenon. We perceive and think about objects in the world; the content of our thoughts is the world itself, not pictures of the world. Scotus's appeal to the presence of the object-as-cognized is obscure, but it has the virtue of making manifest what any satisfactory account of cognition must explain, and what to this day no account of cognition has explained.

### III. IS COGNITION ACTIVE OR PASSIVE (OR BOTH)?

It was axiomatic, for most medieval philosophers, that cognition consists in being acted on in a certain way. This was how Aristotle had described both sensation and intellection,<sup>31</sup> and throughout the Middle Ages few would disagree. But there was considerable

disagreement regarding how exactly to characterize the passive character of cognition. When Scotus comes to consider the causal role played by intellect in cognition, he begins with a detailed discussion of six views being defended at the time. At one extreme, Godfrey of Fontaines argued for the complete passivity of both the senses and intellect. Scotus is not exaggerating when he writes that, on Godfrey's view, "nothing in the intellective part (including both agent and possible intellect) will have in any way an active character . . . with respect to any intellection or with respect to the object of intellection."<sup>32</sup> For Godfrey, the phantasm is what causes cognition, and the possible intellect merely receives that impression.<sup>33</sup> At the opposite extreme lies Peter John Olivi, who simply rejects Aristotle's authority with regard to the passivity of cognition. Olivi mockingly describes Aristotle as "the god of this era," and says that his views in this area are based upon "no adequate argument, indeed virtually no argument at all."<sup>34</sup> Scotus fairly characterizes Olivi as "attributing all activity in intellection to the soul itself"; the same goes for sensation.<sup>35</sup>

In the face of such wildly contrasting views, Scotus takes a characteristically moderate stance, and he takes characteristic delight in working out the intricate metaphysical details. Olivi's position is untenable because it leaves no coherent causal role for external objects and so forces him to postulate some novel fifth kind of cause.<sup>36</sup> Moreover, once external objects fall out of the picture, there is no way of explaining why the intellect is not always capable of thinking whatever it likes.<sup>37</sup> Further, there would be no way to account for how the act of cognition takes on the likeness of its object.<sup>38</sup> Godfrey's view fares no better. First, "it utterly degrades the nature of the soul."<sup>39</sup> Moreover, it would leave us unable to think whenever we wanted to<sup>40</sup> and would leave no room for intellectual reasoning and deduction.<sup>41</sup> Further, it leaves no way of accounting for cognitive error because acts of cognition will necessarily conform with the phantasms (and if the phantasms are themselves in error, there is no way to account for how we may or may not come to grasp as much).<sup>42</sup>

Scotus proposes a compromise account of intellectual cognition, according to which the soul and the object (by way of an intelligible species) must cooperate in producing the act. There are various ways in which two causes cooperate in producing one effect:<sup>43</sup>

A. Cooperating equally (*two people pulling a boat*)

B. Essentially ordered

1. The higher cause acts on the lower
  - 1a. The higher cause gives the lower the power or form by which it acts (*God and creatures; sun and man in procreation*)
  - 1b. The higher cause simply puts the lower in motion (*hand and stick, hitting a ball*)
2. The higher cause does not act on the lower but has a greater causal power than does the lower (*man and woman in procreation*)

In type (A) cases, the causes are of the same kind and order. Either might produce the effect on its own, if its present causal power were simply increased.<sup>44</sup> In type (B) cases, there is no such symmetry. The lower cause in these cases is essentially dependent on the higher cause, either as its cause (1a, 1b) or merely as its essential complement (2). Intellect and object (or species) cooperate in this last way:

They are causes essentially ordered, in the last way, so that one is unconditionally more perfect than the other, and yet each is complete in its own causality, not dependent on the other.<sup>45</sup>

In standard cases (ignoring, for instance, the beatific vision), the intellect is the more perfect cause, and it uses the intelligible species as its instrument.<sup>46</sup>

In type (B) cases, two causes do the job better than could one cause alone.<sup>47</sup> What then does the intelligible species contribute? In what sense is it an instrument? A species is a form, not an object that can be wielded like a stick. Scotus answers this question by drawing an analogy to the way the hand might use the *sharpness* of a knife. Changing the scenario, he imagines this sharpness transferred to the hand itself, in which case the hand would use its sharp edge in much the way that the mind uses an intelligible species. The hand would be the principal cause, in virtue of its moving power, and its sharpness would be a secondary cause. It is in precisely this sense that the intellect and intelligible species jointly produce an act of cognition.<sup>48</sup>

Scotus goes on to make a startling suggestion. Just as it makes perfect sense, in the initial scenario, to think of the hand using the sharpness of the knife, so we can (at least in principle) conceive of

intelligible species being somehow connected to the intellect without actually informing it.

If a species could exist (*inexistens*) for intellect without inhering as a form, and if that manner of existing were or could be sufficiently connected to intellect, then these two partial causes (intellect and species), connected to one another, could have the same operation that they can have now when the species informs the intellect.<sup>49</sup>

This is to say that in principle there is no causal objection to the idea that the content of our thoughts might be determined by features outside the mind. Scotus concedes that it is not clear how a species, as an accidental form, could be connected to the intellect without actually informing it. But Scotus is after another conclusion: his view is that the intellect can (in special cases) operate without being essentially ordered to *any* intelligible species. He believes that an intelligible object might be immediately present to the intellect, without species, and might produce an act of cognition without informing the intellect.<sup>50</sup> In this way, the intellect could have an immediate vision of external objects. The term Scotus coined for this sort of vision is *intuitive cognition* (see Section V).

#### IV. THE OBJECT OF INTELLECT

What is the function of the senses? What is the function of the intellect? The first question is relatively easy to answer: each of the five external senses functions so as to convey a certain sort of information about the external world. In the Aristotelian tradition, the senses are individuated by the fact that each has its own object(s): sight has color, hearing sound, and so forth. Scotus offers a variation of this strategy, proposing to individuate the senses in terms of the different way that each sense is equipped to receive information from without.<sup>51</sup>

What about the intellect? Aquinas had proposed that the intellect's proper object is the quiddity of material substances. The function of intellect, in other words, is to grasp the essences of objects in the material world.<sup>52</sup> Understandably, this met with opposition from other Christian theologians, who questioned whether such a view could be squared with the doctrine of the beatific vision. How could the intellect's proper function be tied to life on earth, when

human happiness is directed entirely toward the next life, toward intellectual union with God? In light of these concerns, among others, Henry of Ghent identified God as the proper object of intellect.<sup>53</sup>

Scotus finds neither view satisfactory, and so he proposes a characteristically subtle middle ground. The proper object of intellect – that is, the object that is primary in virtue of being most suited to intellect (*primum obiectum adaequatum*)<sup>54</sup> – is being (*ens*) taken in its most general sense. In this sense, Scotus argues that being is common to everything that the intellect could potentially conceive. It is common to God and God's attributes, to the essences of created substances, and to all the accidental features of created substances.<sup>55</sup> (Here Scotus must make his controversial claim that the concept of being is univocal between God and creatures.<sup>56</sup>) What unifies the intellect's diverse operations is its grasp of being in all of its various manifestations. Just as sight has color as its object, so the intellect has being, and it is capable of grasping all being in just the way that the eye is capable of grasping all colors.<sup>57</sup>

Ghent's view fails, most basically, because God is not the most common feature of everything intelligible. All things have their being from God, but still we grasp objects in virtue of their own created being:

God contains virtually within himself all things that are intelligible *per se*. But he is not for this reason the adequate object of our intellect, because other beings move our intellect through their own power.<sup>58</sup>

Aquinas's view fares no better. First, it takes too limited a perspective. Even if the essences of material objects were the proper object of intellect in this life, that would not account for the capacities of the blessed in heaven, or even the capacities of separated souls. "The first object assigned to a power is what is adequate to the power *given the nature of the power*, not what is adequate to the power *in a particular state*."<sup>59</sup> To say that in the next life the human intellect will be given a new object and a new function is in effect to claim that the intellect will be made into a different power.<sup>60</sup> So if the intellect has a capacity in the next life, it must have it in this life as well. Moreover, even if in this life the intellect must *begin* with ideas drawn from the material world, still it can develop those ideas in such a way as to transcend the sensible and achieve a real (albeit indirect) understanding of God's nature.<sup>61</sup> Therefore the intellect's

proper object is not the quiddities of material objects but instead all being, including God and the angels.

Scotus believes that there is nothing intelligible to any intellect that is unintelligible to us. (Even God's essence is intelligible, albeit never completely, to the blessed in heaven.) Whatever any mind can know, our minds can know.<sup>62</sup> But of course this holds only in principle. In this life there are many things that we have no knowledge of, and many things that we cannot possibly grasp directly (above all, God's essence). As things stand, the intellect's powers are limited to the world around us, in just the way that Aquinas's account describes. This suggests an objection: if Scotus is right that the intellect's proper object is being in general, then why does the intellect not have access, even in this life, to all forms of being? Scotus handles this objection by distinguishing between the intellect's natural power, which extends to all being, and its presently limited power:

Our intellect understands in its present state only things whose species are displayed in the phantasm. This is so either because of the punishment of original sin, or because of a natural correspondence in operation between the soul's powers, in virtue of which we see that a higher power operates on the same thing that a lower power operates on (assuming that each is operating perfectly).<sup>63</sup>

As far as this life is concerned, the intellect must work through the senses. For now, its proper object is the material world. This seems to be a considerable concession to Aquinas and other advocates of the traditional Aristotelian model. At this point, Scotus's claims about being as the proper object of intellect appear to be highly theoretical, with no direct application to our lives at present.

But the concession is not nearly as considerable as it seems. As we will see in the next section, Scotus is at least tempted to postulate a form of intellectual cognition – intuitive cognition – that grasps objects directly, bypassing phantasms. Moreover, quite apart from intuitive cognition, Scotus rejects a key Aristotelian principle: that the intellect concerns the universal, the senses the singular. Scotus holds that although the senses are limited to grasping the singular, the intellect is capable of grasping both the singular and the universal.<sup>64</sup> Since "intelligibility follows being," and since singular entities have being above all else, the singular must at least in

principle be intelligible.<sup>65</sup> Moreover, Scotus argues that we in fact do grasp the singular through intellect. Otherwise there would be no explanation for some of our most basic mental capacities: How could we draw inductive conclusions on the basis of particulars? How could we love individuals?<sup>66</sup> So even if the intellect is for now limited to cognition through phantasms, Scotus still denies that the intellect's only proper object is quiddities or universals.

If there is anything to the idea that the intellect is incapable of grasping the singular, it is that the intellect cannot grasp the singular *as singular*. But this is something that the senses are likewise incapable of. Scotus argues as follows:

Suppose that two white things are put in front of sight, or two singulars of any sort in front of intellect. Let them be in reality essentially distinct, but with exactly similar accidents, including place (two bodies in the same place, or two rays in the same medium), and with exactly the similar shape, size, color, and so on for any other conditions that might be listed. Neither intellect nor sense would distinguish between them; instead, they would judge them to be one. Therefore, neither one cognizes any such singulars in terms of its proper aspect of singularity.<sup>67</sup>

It is a tenet of Scotus's metaphysics that two individuals might be exactly similar in all their accidental features and yet be individuated by some further element, their haecceity. Yet it is a tenet of his cognitive theory that we cannot know this haecceity (at least in this life), even though we can know singulars.

## V. INTUITIVE COGNITION

Scotus's famed distinction between intuitive and abstractive cognition makes its first explicit appearance in Book 2, Distinction 3 of his *Lectura*:

We should know that there can be two kinds of cognition and intellection in the intellect: one intellection can be in the intellect inasmuch as it *abstracts* from all existence; the other intellection can be of a thing insofar as it is present in its existence.<sup>68</sup>

This would prove to be, by far, Scotus's most influential contribution to the theory of cognition. As Katherine Tachau has shown in detail, "the history of medieval theories of knowledge from ca. 1310 can be traced as a development of this dichotomy."<sup>69</sup>

It is surprising that this is so. Although Scotus was the first to use this terminology to make this distinction, the distinction itself had been made by earlier Scholastics.<sup>70</sup> Moreover, Scotus himself devotes relatively little space to the topic; when he does take up the distinction, he generally employs it in quite modest ways, in contexts peripheral to the subjects of knowledge and cognition. Moreover, the distinction itself is a rather pedestrian one. When Scotus describes intuitive cognition as being “of a thing insofar as it is present in its existence” (as in the preceding excerpt from his *Lectura*), he is simply describing the mode of cognition that we associate with perception: cognition that yields information about how things are right now.<sup>71</sup> In fact, Scotus explicitly counts sensation as a form of intuitive cognition, and he describes imagination as a kind of abstractive cognition.<sup>72</sup> Although Scotus’s followers like to say that intuitive cognition was a “revolutionary” development in medieval philosophy,<sup>73</sup> it is hard to acquire that impression simply by studying Scotus’s texts.

What makes intuitive cognition so interesting? First, and most obviously, there is Scotus’s claim that the human intellect can in principle have intuitive cognition: that our intellects are capable of a kind of intellectual *vision*. (Of course it would not truly be visual, no more than it would be, say, auditory. But the analogy to sight is irresistible.) Our ordinary mode of intellectual operation is abstractive. We grasp the nature of triangles and dogs via phantasms, and this mode of cognition leaves us incapable of determining whether any such things actually exist right now. I can think about dogs in general, or even about one dog in particular. But to know whether a particular dog (or even any dogs) exist right now, I need the senses. Scotus’s surprising claim is that in principle the intellect could have such information without the senses. In effect, Scotus is arguing for the theoretical possibility of some form of extrasensory perception.<sup>74</sup>

There are two main arguments for this claim. First, Scotus argues that the intellect, as a higher cognitive power, should be able to do whatever our lower cognitive powers, the senses, can do.<sup>75</sup> Second, he appeals to a point generally accepted by his contemporaries: that the blessed in heaven *will* have an intellectual, intuitive cognition of the divine essence.<sup>76</sup> These arguments are weak, but they are perhaps strong enough to reach Scotus’s modest conclusion. This modest conclusion requires establishing only that it is *conceivable* for our

intellects to have some kind of direct, perceptual acquaintance with reality. If God can make it happen, then it is at least conceivable. And if the senses can have this kind of cognition, then surely it must be possible, at least in principle, for the intellect to do so as well. All that would be required, presumably, is the right sort of causal influence from object to intellect (see the end of Section III).

Taken only this far, the argument for intuitive cognition is intriguing in an abstract, theoretical way. But the doctrine never would have received such attention if there were nothing more to it. What captured the imagination of later Scholastics was Scotus's suggestion, in some of his latest writings, that intuitive cognition is not just a theoretical possibility but an essential and utterly ordinary aspect of our everyday cognitive lives. He seems to claim, for example, that self-knowledge is a kind of intuitive intellectual cognition:

If we were not to have intuitive cognition of anything, we would not know whether our own acts were present to us, or at least would not know about those acts with any certainty. But this is false, therefore etc.<sup>77</sup>

In an even more striking passage, Scotus seems to contend that the human intellect, in this life, has intuitive cognition not just of its inner states ("sensations") but of the ordinary material objects perceived through the senses: "the intellect not only cognizes universals, which is of course true for abstractive intellection . . . , but it also intuitively cognizes what the senses cognize." As evidence for this claim, Scotus appeals to the intellect's need to reason about particular objects with the knowledge of whether or not they exist.<sup>78</sup> This last passage would exert a tremendous influence on later medieval philosophy. William Ockham quotes it at length, twice, to ensure that his own views about intuitive intellectual cognition "would not be condemned as new."<sup>79</sup>

Scotus's bold claims for intuitive cognition do in some ways look revolutionary. He repeatedly stresses that intuitive cognition differs from abstractive cognition insofar as the former occurs without an intervening species:

An abstractive and an intuitive act differ in kind, because there is a different thing producing the movement in each case. In the first, a species that is similar to the object produces the movement; in the second, the object present in its own right produces the movement.<sup>80</sup>

Intuitive intellectual cognition appears to bypass phantasms and intelligible species, reaching out directly to the things themselves. Such ideas led later Scholastics to become increasingly suspicious of sensible and intelligible species and to give sustained attention to the epistemological problems surrounding the standard Aristotelian account.

Yet these bold passages, as I'll call them, are hard to reconcile with the rest of Scotus's work. In some places, Scotus explicitly denies that intuitive intellectual cognition is possible in this life.<sup>81</sup> Elsewhere, he implicitly makes this denial by insisting that for now our intellects cognize only via phantasms:

In this life, our intellect cognizes nothing except for what a phantasm can produce, because it is acted on immediately only by a phantasm or by what can be captured by a phantasm (*vel a phantasiabili*).<sup>82</sup>

He even makes this point specifically with regard to self-knowledge:

The intellect cannot immediately understand itself, without understanding anything else, because it cannot immediately be moved by itself, given its necessary relationship in this life to what is imaginable.<sup>83</sup>

Sebastian Day has attempted to show that the bold passages are consistent with the rest of Scotus's writings.<sup>84</sup> More recently, and more persuasively, Allan Wolter has argued for a gradual evolution in Scotus's thought.<sup>85</sup> But even this much is doubtful. In his *Quodlibeta*, which date from the last two years of his life, Scotus consistently limits himself to arguing for the mere possibility of intuitive intellectual cognition. In contrast to abstractive cognition, the existence of which "we frequently experience within ourselves," the reality of intuitive cognition is far less clear: "Even though we do not experience it within ourselves with as much certainty, such [cognition] is possible."<sup>86</sup> This seems to be in conflict with the bold claims quoted earlier. For example, if intuitive cognition accounts for self-knowledge, then each of our frequent experiences of abstractive cognition would itself be an instance of an intuitive cognition and ought to be every bit as evident as abstractive cognition. Even if his bolder remarks were written after the *Quodlibeta*, it is hard to believe that Scotus could have changed his mind so dramatically in such a short time.

Moreover, even if Scotus did change his mind, his claims about intuitive cognition are fraught with difficulties. First, despite his claim that intuitive cognition is direct and unmediated by species, he shows no signs of eliminating sensible species from intuitive sensory cognition. (Does he perhaps think that only certain kinds of species are problematic?)<sup>87</sup> Second, his bold claims for intuitive intellectual cognition provide no indication of how the intellect could possibly function without going through the senses. In the case of self-knowledge, the problem is perhaps less acute. But it is not at all clear how Scotus can account for intuitive intellectual cognition of the material world. Obviously, some sort of causal connection must be in place.<sup>88</sup> Yet he explicitly holds that intuitive intellectual cognition is immediate and that it does not work through species (see Note 80). If Scotus is in fact committed to his bold view, then the only position that seems at all reasonable is to allow that, in this life, intuitive intellectual cognition comes via the senses. This is how Ockham, for instance, would later account for intuitive intellectual cognition.<sup>89</sup> But this solution would require Scotus to revise some of his claims about intuitive cognition: he would have to concede that it does take place through species (or he would have to abandon species entirely), and he would have to give up the claims of immediacy that he makes for intuitive cognition.<sup>90</sup> So understood, intuitive intellectual cognition becomes at once more plausible and less interesting.

## VI. DIVINE ILLUMINATION

Although later Scholastics would increasingly turn to intuitive cognition in their analyses of knowledge and certainty, Scotus makes no such appeal. His most detailed and interesting discussion of these topics comes in reply to Henry of Ghent. Ghent had argued that human beings cannot attain "certain and pure truth" without a special divine illumination. (By a "special" illumination he means something over and above the natural light with which human beings have been endowed. Fire, for example, needs no special illumination in order to burn.<sup>91</sup>) This would turn out to be the last hour of daylight for divine illumination. And it was Scotus who was responsible for quenching the theory, once and for all.

Scotus's argument consists partly in a refutation of skepticism and partly in a refutation of Ghent's case for a special divine illumination.

In doing the latter, Scotus works his way through Ghent's own arguments for the fallibility of unaided human cognition (arguments based on the constant changeability of the human mind and its objects).<sup>92</sup> Scotus also makes a more general claim: if human cognition were fallible in the way Ghent argues, then outside illumination could not, even in principle, ensure "certain and pure knowledge." On Ghent's account, the human mind cooperates with the divine light in achieving such knowledge. Scotus replies:

When one of what comes together is incompatible with certainty, then certainty cannot be achieved. For just as from one premise that is necessary and one that is contingent nothing follows but a contingent conclusion, so from something certain and something uncertain, coming together in some cognition, no cognition that is certain follows.<sup>93</sup>

If one part of a system is fallible, then that fallibility infects the process as a whole. Scotus's bold – but reasonable – claim is that if the human mind were intrinsically incapable of achieving certain knowledge, then not even divine illumination could save it.

Scotus's own view is that the human mind is capable of such knowledge on its own. If by "certain and pure truth" Ghent means "infallible truth, without doubt and deception," then Scotus thinks he has established that human beings "can achieve this, by purely natural means."<sup>94</sup> How *can* such a thing be established? How can the skeptic be refuted without appealing to divine illumination? Scotus distinguishes four kinds of knowledge:

- a priori (*principia per se nota*)
- inductive (*cognita per experientiam*)
- introspective (*cognoscibilia de actibus nostris*)
- sensory (*ea quae subsunt actibus sensus*)

The general strategy is to show that sensory knowledge rests on inductive knowledge, that inductive knowledge rests on a priori knowledge, and that introspective knowledge can be defended as analogous to a priori knowledge.<sup>95</sup> Scotus's implicit aim is to shift as much weight as possible onto the broad shoulders of a priori knowledge.

This entire discussion – by far the most sophisticated of its kind in the Middle Ages – merits more careful study than it has yet received. Here I want to focus on how Scotus makes the case for "infallible truth" with respect to a priori claims. Notice, initially, that 'a priori' is not Scotus's own phrase: he speaks of "principles known (*nota*)

*per se.*" One might initially think that such principles should be described as analytic truths. But that will not do. To say that these principles are "known *per se*" or "self-evident" is to give them a certain *epistemic* status, to make a point about how they are known. Take, for instance, the a priori principle that inductive knowledge rests on, that *whatever is the usual result of a nonfree cause is the natural effect of that cause.*<sup>96</sup> Perhaps this can be construed as analytic, on some notions of analyticity. But Scotus is committed to something else: that this is a principle that "has evident truth" in virtue solely of its terms.<sup>97</sup> This is a point not about what makes the sentence true, but about how we grasp its truth. Scotus is saying that anyone who understands the terms will immediately see that the sentence is true.

For Scotus, the a priori is the bedrock on which other sorts of knowledge rest, and so he does not attempt to locate some further set of even more basic truths. Instead, he argues that our a priori knowledge is foolproof because of certain psychological facts. When one considers a proposition like *Every whole is greater than its part*, one immediately grasps that the terms are related in such a way that the proposition must be true:

There can be in the intellect no apprehension of the terms or composition of those terms without the conformity of that composition to the terms emerging (*quin stet conformitas*), just as two white things cannot arise without their likeness emerging.<sup>98</sup>

The relationship between terms in an a priori proposition is like the resemblance between two white objects. As soon as we grasp an a priori truth, we immediately grasp its truth: we simply see that the proposition must be true, "without doubt and deception." Of course, we will not grasp its truth if we do not understand the meaning of its terms, but in that case we will not have truly formed the proposition in our mind. And in contrast to the analogous case of recognizing similarity, there is no room for sensory error here. The senses help us acquire certain concepts, but once we have those concepts, the senses drop out of the picture: sensory reliability becomes irrelevant. Scotus offers the example of a blind man miraculously shown in his dreams an image of black and white. Once he acquires these concepts, he can recognize as truly and infallibly as anyone – his blindness notwithstanding – that white is not black.<sup>99</sup>

It was conceptual truths of this sort that led Augustine to his famous question:

If we both see that what you say is true and what I say is true, then where do we see it? Not I in you, nor you in me, but both in that unchangeable truth that is above our minds.<sup>100</sup>

Unwilling to discard such a prominent Augustinian theme, Scotus articulates four senses in which the human intellect sees infallible truths in the divine light. In each sense, the divine light acts not on us but on the objects of our understanding. By giving objects their intelligibility (*esse intelligibile*), the divine intellect "is that in virtue of which secondarily the objects produced move the intellect in actuality."<sup>101</sup> When the human mind grasps an a priori truth, it does so immediately and infallibly not because the mind has received any special illumination, but because the terms of the proposition are themselves intelligible: our grasp of a proposition "seems to follow necessarily from the character of the terms, which character they derive from the divine intellect's causing those terms to have intelligible being naturally."<sup>102</sup> It is not that we are illuminated by the divine light, but that the truth we grasp is illuminated.

This marks a turning point in the history of philosophy, the first great victory for naturalism as a research strategy in the philosophy of mind. From the beginning, philosophers had appealed to the supernatural in their accounts of cognition. Socrates had his "divine sign,"<sup>103</sup> Plato had recollection, Aristotle the agent intellect. It was a step toward naturalism when Aquinas located the agent intellect within the human soul and refused to postulate any special divine illumination. But Aquinas simply repositioned this illumination, making it innate rather than occasional. For Aquinas it was still a fundamentally miraculous fact that our intellect manages to grasp unchanging truths.<sup>104</sup> Scotus is the first major philosopher to attempt a naturalistic account of the human cognitive system. When we grasp some conceptual truth, nothing miraculous or divine happens within us: "the terms, once apprehended and put together, are naturally suited (*sunt nati naturaliter*) to cause an awareness of the composition's conformity with its terms."<sup>105</sup> Scotus says that the intellect's operation is, if anything, more natural, less in need of some special intervention, than are other natural actions, such as fire's producing heat.<sup>106</sup> It is of course God who gives the world its

intelligibility, just as it is God who creates our cognitive powers. But what is new in Scotus is the idea that the mind is not a special case. From this point forward, divine illumination would cease to be a serious philosophical possibility.

## NOTES

- 1 It is a credit to the ingenuity of Scott MacDonald that he was able to construct for Thomas Aquinas such a coherent theory of knowledge in his chapter by that name in Kretzmann and Stump 1993. But it is a sign of how far these issues are from Aquinas's main concerns that MacDonald has to draw almost exclusively on an obscure source, Aquinas's commentary on the *Posterior Analytics*.
- 2 Cf. Wolter 1990b, 104: "Like most of his contemporaries, Scotus held a basically Aristotelian theory of knowledge, which he modified only slightly in the interests of an earlier Franciscan–Augustinian tradition."
- 3 On the external senses, see *In De an.* q. 6. On the common sense, see *In De an.* qq. 9–10. Scotus mentions other internal senses in scattered passages, but he never develops a view of his own. See Steneck 1970, 127–37.
- 4 See, for example, *Ord.* 1, d. 3, pars 3, q. 4, n. 594; *Ord.* 2, d. 3, pars 2, q. 1, n. 296; *In De an.* q. 5, nn. 3–4; *Quodl.* q. 13, n. 62.
- 5 See, for example, *In De an.* q. 11, n. 4.
- 6 See *Ord.* 2, d. 3, pars 2, q. 1, n. 297 and *Ord.* 1, d. 3, pars 3, q. 2, nn. 541–42 commenting on *De anima* 3.4 (429<sup>a</sup>24): "[the intellect] is not actually, before it thinks, any of the things there are."
- 7 See, for example, *In De an.* q. 13, nn. 1–2.
- 8 See, for example, *Rep.* 2, d. 16; *Quodl.* q. 15, nn. 60–63.
- 9 See, for example, *Ord.* 1, d. 3, pars 3, q. 1, nn. 359–63; *Lect.* 1, d. 3, pars 3, q. 1, n. 275; *Quodl.* q. 15, nn. 46–47, 51; *In De an.* q. 11, nn. 4–5; *In Metaph.* 1, q. 4, n. 14; 8, q. 18, nn. 48–57. Cf. Averroës, *De an.* III comm. 18 (439).
- 10 See, for example, *Ord.* 1, d. 3, pars 3, q. 1, nn. 363, 370, 388, *textus interpolatus* at n. 378 (Vatican 3: 364–66); *Quodl.* q. 15, n. 52; *In Metaph.* 7, q. 18, n. 51; *In De an.* q. 14 and q. 17; *In Periherm.* I, 1, q. 2; *In Periherm.* II, q. 1; Perler 1996.
- 11 See, for example, *In Metaph.* 2, qq. 2–3, n. 80. At *In Metaph.* 7, q. 15, n. 20, Scotus proposes a test for cognition *per se*: "for a power cognizing *per se* some object under some account, it will cognize that *per se* which remains when everything else is stripped away." In the case of vision, then, its *per se* object(s) would be the bedrock feature(s) that cannot be

removed from the perception, such as color, shape, size, motion. Take away any one of these, and vision is no longer possible.

For further discussion of sensation *per se* and *per accidens*, see *In De an.* q. 6, n. 6, where Scotus offers a different test: something is sensible *per se* if it makes a difference to the impression received by the sense. (The forthcoming edition of *In De an.* shows that the text here should read "*quia sensibilia communia immutant per se sensus proprios*," omitting *non* from that phrase.)

- 12 See, for example, *Ord.* 1, d. 3, pars 3, q. 1, nn. 352, 357, 365; *In Metaph.* 1, q. 4, n. 14.
- 13 *Ord.* 1, d. 3, pars 1, qq. 1–2, n. 35. Cf. *Ord.* 1, d. 3, pars 1, q. 3, n. 187; 1, d. 3, pars 3, q. 1, nn. 366, 392; *In De an.* q. 11, nn. 4–5.
- 14 *De anima* 3.7 (431<sup>a</sup>16–17). Cf. 431<sup>b</sup>2, 432<sup>a</sup>8–9, <sup>a</sup>13–14; *De memoria* 450<sup>a</sup>1.
- 15 *Liber de anima* V.3 (105).
- 16 ST I.84.7.
- 17 *Lect.* 2, d. 3, pars 2, q. 1, n. 255; cf. *Lect.* 1, d. 3, pars 3, q. 1, n. 300; *Ord.* 1, d. 3, pars 3, q. 1, n. 392; *Ord.* 1, d. 3, pars 1, q. 3, n. 187; *In De an.* q. 17, n. 13; q. 18; *Op. Ox.* 4, d. 45, q. 1. For further discussion see R. Dumont 1965, 620–4; Honnefelder 1979, 178–81.
- 18 *Quodl.* q. 13, n. 69.
- 19 *In Metaph.* 7, q. 14, n. 29. For further discussion of the role of intentions in cognition, see *Ord.* 2, q. 13 (McCarthy 1976, 26).
- 20 *Quodl.* q. 13, n. 96.
- 21 For intelligible species see, for example, *Quodl.* q. 13, n. 97; *In Periherm.* II, q. 1; *Ord.* 1, d. 3, pars 3, q. 1 passim; *Ord.* 1, d. 3, pars 3, q. 2, nn. 487, 541; *Lect.* 1, d. 3, pars 1, q. 3, n. 185; *Lect.* 1, d. 3, pars 3, q. 1 passim; *Lect.* 2, d. 3, pars 2, q. 3, n. 345. For sensible species see, for example, *In De an.* q. 5; *Lect.* 1, d. 3, pars 3, q. 1, nn. 283–4; *Lect.* 2, d. 3, p. 2, q. 1, n. 261; *Ord.* 1, d. 3, p. 1, q. 4, n. 239; *Ord.* 1, d. 3, pars 3, q. 2, nn. 471–3, 504–5. In this last passage, Scotus holds that ‘species’ can refer either to the act itself of cognition, or (more customarily) to the prior likeness in virtue of which the act occurs.
- 22 See Pasnau 1997b, part two.
- 23 *Ord.* 1, d. 3, pars 3, q. 1, n. 334. The argument is drawn from Henry of Ghent, *Quodlibet* V.14 (f.174<sup>v</sup>Z). Ghent’s concern is with rejecting one particular aspect of the standard species theory, the role given to intelligible species (see Pasnau 1997b, Appendix B). Scotus repeatedly defends the standard theory against Ghent’s attacks: see *Ord./Lect.* 1, d. 3, pars 3, q. 1; *In De an.* q. 17.
- 24 See Peter John Olivi, *II Sent.* q. 73 (3: 55); William Ockham, *Rep.* II.12–13 (5: 274), *Rep.* III.2 (6: 59).

- 25 *Ord.* 1, d. 3, pars 3, q. 1, *textus interpolatus* at n. 382 (Vatican 3:366–67). Cf. *Ord.* 1, d. 3, pars 3, q. 1, n. 386; 1, d. 36, n. 28; *Lect.* 1, d. 3, pars 3, q. 2, n. 392; and Perler 1994.
- 26 *Ord.* 1, d. 3, pars 3, q. 1, n. 382. Cf. *Ord.* 1, d. 3, pars 1, q. 4, n. 260; *In De an.* q. 17, n. 6.
- 27 *Quodl.* q. 13, n. 43.
- 28 *In Metaph.* 7, q. 18, n. 51; *Quodl.* q. 13, n. 33, nn. 41–7 and 60–1; *Ord.* 1, d. 3, pars 3, q. 1, nn. 386–7, *textus interpolatus* at n. 359 (Vatican 3: 363). Sometimes, Scotus speaks of the object as having diminished existence (*esse deminutum*): see, for example, *Ord.* 1, d. 36, n. 34; *Ord.* 2, d. 3, pars 2, q. 1, n. 271; *Lect.* 2, d. 3, pars 2, q. 1, n. 246.
- 29 *Ord.* 1, d. 3, pars 3, q. 1, n. 336.
- 30 Scotus considers this issue at *Lect.* 1, d. 3, pars 3, q. 2, nn. 390–3. See also *Quodl.* q. 14, a. 3; *In Periherm.* II, q. 1; *Lect.* 2, d. 3, pars 2, q. 2, n. 283.
- 31 See *De an.* 2.11 (423<sup>b</sup>32); 3.4 (429<sup>a</sup>15).
- 32 *Ord.* 1, d. 3, pars 3, q. 2, n. 428; cf. *Lect.* n. 326. Godfrey's views are presented throughout his *Quodlibeta* – see, for example, 8.2, 9.19, 10.12, 13.3.
- 33 Like Henry of Ghent (see note 23), Godfrey contends that the phantasm itself can act on the possible intellect, and that intelligible species are superfluous. The agent intellect does play an active role in preparing the phantasm, but merely insofar as it separates the phantasm's intelligible content from the sensible accidents. See *Ord.* 1, d. 3, pars 3, q. 2, n. 427, and Wippel 1981, 194–200, especially note 78.
- 34 *II Sent.* Q58 ad 14.3 (2: 482).
- 35 *Ord.* 1, d. 3, pars 3, q. 2, n. 407; cf. *Lect.* n. 313 and Pasnau 1997b, 130–34, 168–81.
- 36 *Ord.* 1, d. 3, pars 3, q. 2, n. 415; cf. *Lect.* n. 324. Olivi himself says that on his view “the soul's apprehensive powers are the complete efficient cause of their actions: objects cooperate with them not in the manner of an efficient cause but in the manner of an object” (Olivi 1998, 55).
- 37 *Ord.* 1, d. 3, pars 3, q. 2, n. 414.
- 38 *Ord.* 1, d. 3, pars 3, q. 2, n. 490; cf. *Lect.* n. 360; *Quodl.* q. 15, n. 30.
- 39 *Ord.* 1, d. 3, pars 3, q. 2, n. 429; cf. *Lect.* nn. 336, 403; *Quodl.* q. 15, n. 27; *In De an.* q. 12, n. 7.
- 40 *Ord.* 1, d. 3, pars 3, q. 2, n. 486; cf. *Ord.* 1, d. 3, pars 3, q. 4, n. 578.
- 41 *Ord.* 1, d. 3, pars 3, q. 2, n. 440; cf. *Lect.* n. 333.
- 42 *Ord.* 1, d. 3, pars 3, q. 2, n. 435; cf. *Lect.* n. 332. One fascinating aspect of Scotus's work is that he frequently adds later remarks undermining his earlier arguments. In this case, he remarks retrospectively that the argument “is not compelling against them [Godfrey], because it raises

- a difficulty common to every view" (n. 444). Regardless of whether one posits phantasms, intelligible species, or the intellect as the active cause, the process will be an entirely natural one, not a free one. Therefore, it should determinately produce the same result, time after time. Therefore, there will always be a puzzle about how thought sometimes goes right, sometimes goes wrong. Yet, as is often the case with Scotus's "extra" remarks, this is surely not intended to be conclusive. For whereas Godfrey's view leaves little room to explain the variable, unpredictable nature of our thoughts, a less passive account, like Scotus's, could appeal to the will's influence on the intellect. For a move in this direction, see *Quodl.* q. 15, n. 28.
- 43 *Ord.* 1, d. 3, pars 3, q. 2, n. 496; cf. *Lect.* nn. 366–7.
- 44 *Lect.* 1, d. 3, pars 3, q. 2, n. 366: "if the entire power that is in all were in one, that one would pull the boat." Cf. *Ord.* 1, d. 3, pars 3, q. 2, n. 497.
- 45 *Ord.* 1, d. 3, pars 3, q. 2, n. 498. See also *Ord.* 2, d. 3, pars 2, q. 1, nn. 270, 278–85. Scotus presumably has in mind the object (or species) and the possible intellect. The agent intellect, in contrast, is responsible for producing intelligible species (see *Quodl.* q. 15, n. 51), and so this pairing would apparently fall into class B1a.
- 46 *Ord.* 1, d. 3, pars 3, q. 3, nn. 559–62; *Lect.* nn. 379–81.
- 47 *Lect.* 1, d. 3, pars 3, q. 2, n. 367.
- 48 *Ord.* 1, d. 3, pars 3, q. 2, n. 500; cf. *Lect.* n. 372.
- 49 *Ord.* 1, d. 3, pars 3, q. 2, n. 500; cf. *Lect.* n. 370.
- 50 *Ord.* 1, d. 3, pars 3, q. 2, nn. 500–1; *Lect.* n. 370; *Lect.* 1, d. 3, pars 3, q. 1, n. 305.
- 51 See *In De an.* q. 6, n. 3: "The adequacy of the [five] senses is in this way drawn from the variety of impressions on the organ from the object, and from the variety of ways the two conform."
- 52 See, for example, *ST* 1.84.7, 88.3, and Scotus's discussion at *Ord.* 1, d. 3, pars 1, q. 3, nn. 110–24; *In Metaph.* 2, q. 3, nn. 22–75; *In De an.* q. 19, nn. 2–4; *Quodl.* q. 14, n. 40. The bulk of *Ord.* 1, d. 3, pars 1, q. 3 is translated in Hyman and Walsh 1973, 614–22.
- 53 *Summa quaestionum ordinariorum* 24.8–9. See Scotus's discussion in *Ord.* 1, d. 3, pars 1, q. 3, nn. 125–127; *Lect.* nn. 88–91.
- 54 *Ord.* 1, d. 3, pars 1, q. 2, nn. 69–70; *Ord.* 1, d. 3, pars 1, q. 3, n. 108. For an account of what is meant by *primum obiectum adaequatum*, see *In De an.* q. 21, n. 2; *Lect.* 1, d. 3, pars 1, qq. 1–2, n. 90. See also Honnefelder 1979, 55–98.
- 55 *Ord.* 1, d. 3, pars 1, q. 3, n. 137; *In De an.* q. 21, nn. 4–8.
- 56 *Ord.* 1, d. 3, pars 1, q. 1, nn. 26–55; *Ord.* 1, d. 3, pars 1, q. 2, nn. 129, 152–66.

- 57 *Ord.* 1, d. 3, pars 1, q. 3, nn. 117, 151, 186.
- 58 *Ord.* 1, d. 3, pars 1, q. 3, n. 127; cf. nn. 128, 190, 195; *Lect.* 1, d. 3, pars 1, q. 2, n. 91; *In De an.* q. 21, n. 3.
- 59 *Ord.* 1, d. 3, pars 1, q. 3, n. 186. Cf. *In De an.* q. 19, n. 2.
- 60 *Ord.* 1, d. 3, pars 1, q. 3, n. 114; *Lect.* 1, d. 3, pars 1, q. 1, nn. 40, 92; *Quodl.* q. 14, nn. 41–2.
- 61 *In De an.* q. 19, nn. 5–8.
- 62 *Quodl.* q. 14, n. 6 and n. 43; *Ord. prol.*, pars 1, n. 7.
- 63 *Ord.* 1, d. 3, pars 1, q. 3, n. 187. Cf. *Quodl.* q. 14, n. 44; *In De an.* q. 18, n. 4.
- 64 See, for example, *Quodl.* q. 13, n. 32, and *Op. Ox.* 3, d. 14, q. 3: “there are two kinds of cognition, abstractive and intuitive, . . . and each can cognize both the nature, as it precedes singularity, and the singular, as a this.” For Aristotle, see *Phys.* 1.5 (189<sup>a</sup>6–8); *De an.* 2.5 (417<sup>b</sup>19–29). For the medieval history of this question, with particular attention to Scotus’s position, see Bérubé 1964.
- 65 *In De an.* q. 22, n. 4; *In Metaph.* 7, q. 15, n. 14.
- 66 *In De an.* q. 22, nn. 4–5.
- 67 *In De an.* q. 22, n. 6; cf. *In Metaph.* 7, q. 13, n. 158; q. 15, n. 20.
- 68 *Lect.* 2, d. 3, pars 2, q. 2, n. 285. Cf. *Ord.* 1, d. 1, pars 1, q. 2, nn. 34–6; *Ord.* 2, d. 3, pars 2, q. 2, n. 321 (translated in Hyman and Walsh 1973, 631–2); *Quodl.* q. 6, nn. 18–19; *In Metaph.* 7, q. 15, n. 18; *Collatio* 36, n. 11.
- 69 Tachau 1988, 81.
- 70 In particular, in Henry of Ghent. See S. Dumont 1989, 592–3. The terms *intuitiva* and *intuitio* were likewise common: see Tachau 1988, 70, n. 58. Lynch 1972 argues for the importance of Vital du Four’s theory of intuitive cognition.
- 71 Often, especially in his earliest works, Scotus uses the term ‘vision’ to refer to intuitive cognition (see S. Dumont 1989, 581). I am focusing here solely on what Scotus calls perfect intuitive cognition, ignoring what he calls imperfect intuitive cognition, which gives us information about the existence of things in the past or future. For a discussion of the latter, see Wolter 1990b, 115–17.
- 72 *Ord.* 2, d. 3, pars 2, q. 2, n. 323; cf. *Lect.* n. 290; *Quodl.* q. 13, n. 27; *In Metaph.* 2, q. 3, nn. 80, 109.
- 73 See, for example, Day 1947, 139.
- 74 Even this is not original with Scotus. Olivi, for example, devotes a short quodlibetal question to considering “whether our intellect can immediately see external sense objects without any sensory act” (*Quodlibet* I.5 [Venice, 1509], f.3<sup>r</sup>). He concludes that the answer is no, in our present state, but he leaves open the question of whether it might be within the intellect’s absolute power.

- 75 *Quodl.* q. 6, nn. 18–19; q. 13, n. 29; *Ord.* 2, d. 3, pars 2, q. 2, n. 320; *Lect.* n. 287; *In Metaph.* 2, q. 3, n. 112; *Ord.* 4, d. 45, q. 3 (Wolter and Adams 1993, 205); *Op. Ox.* 4, d. 49, q. 8; 4, d. 49, q. 12.
- 76 See *Quodl.* q. 6, n. 20; q. 13, n. 28; *Ord.* 2, d. 3, pars 2, q. 2, n. 322; *Lect.* n. 289. On the claim's general acceptability, see S. Dumont 1989, 583.
- 77 *Op. Ox.* 4, d. 49, q. 8. Cf. *Op. Ox.* 4, d. 43, q. 2, where Scotus makes it clear that such self-knowledge is intellectual (although there he does not explicitly speak of intuitive cognition).
- 78 *Ord.* 4, d. 45, q. 3 (Wolter and Adams 1993, 205): "Supposito enim quod intellectus non tantum cognoscat universalialia (quod quidem est verum de intellectione abstractiva, de qua loquitur Philosophus, quia sola illa est scientifica), sed etiam intuitive cognoscat illa quae sensus cognoscit (quia perfectior et superior cognoscitiva in eodem cognoscit illud quod inferior), et etiam quod cognoscat sensationes (et utrumque probatur per hoc quod cognoscit propositiones contingenter veras, et ex eis syllogizat; formare autem propositiones et syllogizare proprium est intellectui; illarum autem veritas est de objectis ut intuitive cognitis, sub ratione scilicet existentiae, sub qua cognoscuntur a sensu)..."

This passage is embedded within a larger argument for the presence of memory within intellect: Scotus contends that there could be no intellectual memory if the intellect had only abstractive cognition (205–6). See also *Op. Ox.* 3, d. 14, q. 3, where much the same argument is made in the context of Christ's intellect. (For the *Ordinatio* text of 3, d. 14, q. 3, see Wolter 1990b, 101–2, 116–17.) Another intriguing text is an addition to *In Metaph.* 7, q. 15, where Scotus first denies the possibility of intuitive intellectual cognition in this life (n. 26), then seems to embrace it (nn. 27–8), and then adds further remarks (nn. 28–9) that muddy the waters to such a degree that I cannot see where he ultimately stands.

- 79 *Ord.* prol., pars 1, q. un. Cf. *Rep.* 4, q. 14.
- 80 *Op. Ox.* 4, d. 49, q. 12, n. 6. Cf. *Quodl.* q. 13, n. 33; q. 14, n. 36; *Op. Ox.* 4, d. 45, q. 2, n. 12; *Ord.* 2, d. 9, qq. 1–2, nn. 65, 98; *De primo princ.* 4.89 (Wolter 1966, 149).
- 81 *In Metaph.* 2, q. 3, n. 81: "within intellect, no visual or intuitive apprehension – a first cognition – is possible in this life." But then a few pages later (n. 111), Scotus remarks that the issue "is in doubt," and he gives arguments for each side. (Both of these passages are later additions.) See also *Lect.* 2, d. 3, pars 2, q. 1, n. 250: "but now, since we understand nothing except through abstraction. . . ." But this claim does not appear in the *Ordinatio* (cf. n. 277).
- 82 *Op. Ox.* 3, d. 14, q. 3, n. 9. Cf. *Lect.* 2, d. 3, pars 2, q. 1, nn. 253–5; *Ord.* 1, d. 3, pars 1, qq. 1–2, n. 35 (as quoted in Section I); *Ord.* 1, d. 3, pars 1,

- q. 3, n. 187 (as quoted in Section IV); *Ord.* 1, d. 3, pars 3, q. 1, n. 392; *Ord.* 1, d. 3, pars 3, q. 2, n. 487; *In Metaph.* 1, q. 4, n. 14; *In De an.* q. 11, nn. 4–5; q. 19, n. 5.
- 83 *Ord.* 2, d. 3, pars 2, q. 1, n. 293. Cf. nn. 289–92; *Lect.* 2, d. 3, pars 2, q. 1, n. 256, *In De an.* q. 19, n. 6.
- 84 Day 1947. He presents it as Scotus's consistent position that intuitive intellectual cognition "is a fact of everyday experience" (86). Although Day's book remains the most useful single source for information on Scotus's theory in virtue of its thorough collection and analysis of texts, his conclusions should be treated with great suspicion. For a more balanced treatment, see Bérubé 1964, ch. 7.
- 85 Wolter 1990b.
- 86 *Quodl.* q. 6, nn. 18–19.
- 87 On sensible species, see note 21. On intuitive cognition without species, Day 1947 remarks, "this is a problem that has exercised the ingenuity of Scotistic commentators for centuries" (105). Some contend that intuitive intellectual cognition must involve at least intelligible species (Gilson 1952, 542, 549–50, 553n; Langston 1993), but see Honnefelder 1979, 244–52.
- 88 See *Quodl.* q. 14, n. 36, and *In Metaph.* 7, q. 15, n. 22: "No cognitive power within us cognizes a thing in virtue of its absolute cognizability – that is, inasmuch as it is apparent in its own right. We cognize it only inasmuch as it is capable of moving our cognitive power."
- 89 See the discussion in Adams 1987, 506–9. Ockham explicitly raises the worry that Scotus "elsewhere claims the opposite." Then he dismisses the worry, explaining that he is relying on Scotus not as an authority but merely as a precedent for his own views: "if elsewhere he said the opposite, I do not care; here he nevertheless held this view" (*Ordinatio* 1, pro., q. 1 [1: 47]).
- 90 John Marenbon reaches a similar conclusion. His interesting suggestion is that, for Scotus, intellectual intuition of material particulars occurs in virtue of the intellect's directly and intuitively apprehending occurrent acts of sensation: this "may seem to be indirect; but how could it be conceived more directly?" (Marenbon 1987, 168–9). Bérubé likewise holds that in this life the intellect acquires its information through the senses, even in cases of intuitive cognition. But he takes issue with an interpretation like Marenbon's and insists that the intellect still manages a direct grasp of particulars (Bérubé 1964, 201). Wolter perhaps has in mind a similar balancing act when he denies that "Scotus believed our intellect was ever in direct causal, as opposed to intentional, 'contact' with the extramental object in the physical world" (Wolter 1990b, 122).

- 91 *Lect.* 1, d. 3, pars 1, q. 3, n. 144. Ghent's own discussion comes in the first article of his *Summa quaestionum ordinarium*. See Pasnau 1995.
- 92 *Ord.* 1, d. 3, pars 1, q. 4, nn. 246–57; *Lect.* 1, d. 3, pars 1, q. 3, nn. 157–9. For a detailed discussion of divine illumination, see Marrone 2001. Wolter translates *Ord.* 1, d. 3, pars 1, q. 4 in Wolter 1987, 97–131.
- 93 *Ord.* 1, d. 3, pars 1, q. 4, n. 221. Cf. *Lect.* 1, d. 3, pars 1, q. 3, nn. 168–70.
- 94 *Ord.* 1, d. 3, pars 1, q. 4, n. 258.
- 95 *Ord.* 1, d. 3, pars 1, q. 4, nn. 229–45; cf. *Lect.* 1, d. 3, pars 1, q. 3, nn. 172–81, translated in Frank and Wolter 1995. For another fascinating treatment of these same issues, see *In Metaph.* 1, q. 4. See also Effler 1968 and Vier 1951, 153–65 (sensory knowledge), 136–52 (induction), 125–30 (introspection).
- 96 “Quidquid evenit ut in pluribus ab aliqua causa non libera est effectus naturalis illius causae” (*Ord.* 1, d. 3, pars 1, q. 4, n. 235).
- 97 *Ord.* 1, d. 2, pars 1, qq. 1–2, nn. 15, 21. For discussion of *per se nota* in Scotus, see Vier 1951, 66–91, and Van Hook 1962, neither of whom raises the issue I address here.
- 98 *Ord.* 1, d. 3, pars 1, q. 4, n. 230. *Lect.* 1, d. 3, pars 1, q. 3, n. 174 presents much the same account, but without the compelling analogy of “two white things.” See also *In Metaph.* 1, q. 4; 6, q. 3, nn. 50–60.
- 99 *Ord.* 1, d. 3, pars 1, q. 4, n. 234; *Lect.* 1, d. 3, pars 1, q. 3, nn. 175–6 says much the same, but without the clever case of the blind man. See also *In Metaph.* 1, q. 4, nn. 43–6, where the blind man makes another appearance.
- 100 *Confessions* XII.25.35, partially quoted at *Ord.* 1, d. 3, pars 1, q. 4, n. 206.
- 101 *Ord.* 1, d. 3, pars 1, q. 4, n. 267.
- 102 *Ord.* 1, d. 3, pars 1, q. 4, n. 268; cf. *Lect.* 1, d. 3, pars 1, q. 3, nn. 191–2.
- 103 *Apology* 31d.
- 104 See, for example, *De veritate* 10.6 and 11.1. I argue for this interpretation in Pasnau 2002, ch. 10, sec. 2.
- 105 *Ord.* 1, d. 3, pars 1, q. 4, n. 269.
- 106 *Lect.* 1, d. 3, pars 1, q. 3, n. 201. The point is that fire is only contingently hot, whereas the mind cannot help but see certain truths. Scotus drops this line in the *Ordinatio*, perhaps thinking that it pushes matters too far, but he continues to stress that the intellect exhibits “maxima naturalitas” (*Ord.* 1, d. 3, pars 1, q. 4, n. 269; cf. n. 272).